

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1. (Currently Amended) A mixing tube comprising a first mixing passage and a second mixing passage, in each of which a plurality of elements having a sectional shape that changes continuously are connected in series, such that a plurality of types of materials to be mixed pass through the first mixing passage and the second mixing passage, whereby the materials to be mixed are repeatedly divided and aggregated in a passing process;

wherein the first mixing passage and the second mixing passage are formed by a first outer frame member, a second outer frame member, and a partition member is interposed between the first outer frame member and the second outer frame member, the three members dividing the mixing tube in a direction toward which the materials to be mixed pass;

wherein a plurality of holes, each having the same size as one another, are formed at fixed intervals in the partition member in a direction along which the materials to be mixed are mixed, such that the first mixing passage and the second mixing passage repeatedly divide and aggregate due to the holes, thereby repeatedly dividing and aggregating the materials to be mixed so that the materials to be mixed are divided  $2^N$  times and merged together; and

wherein said mixing tube comprises a soft thermoplastic resin which can be squeezed over its entirety with a predetermined force.

2. (Previously Presented) The mixing tube according to claim 1, further comprising:

intermediate partitions provided in the first outer frame member and the second outer frame member, the intermediate partitions dividing the first mixing passage and the second mixing passage, wherein the intermediate partitions of the first outer frame

member and the second outer frame member are welded in the holes of the partition member.

3. (Previously Presented) The mixing tube according to claim 1, further comprising: intermediate partitions provided in the first outer frame member and the second outer frame member, the intermediate partitions dividing the first mixing passage and the second mixing passage, wherein the intermediate partitions of the first outer frame member and the second outer frame member are each welded to the partition member.

4. (Previously Presented) The mixing tube according to claim 3, further comprising: joining portions provided in the holes of the partition member, the joining portions contacting the intermediate partitions of the first outer frame member and the second outer frame member, wherein the joining portions are welded to the intermediate partitions of the first outer frame member and the second outer frame member.

5. (Previously Presented) The mixing tube according to claim 1, further comprising: flanges provided in joining portions where the first outer frame member, the second outer frame member, and the partition member are joined, the flanges formed along, and outside of, the first mixing passage and the second mixing passage; wherein the flanges of the partition member are sandwiched by the flanges of the first outer frame member and the second outer frame member, thus integrating the first outer frame member, the second outer frame member, and the partition member and forming the first mixing passage and the second mixing passage.

6. (Previously Presented) The mixing tube according to claim 3, further comprising: flanges provided in joining portions where the first outer frame member, the second outer frame member, and the partition member are joined, the flanges formed along, and outside of, the first mixing passage and the second mixing passage;

wherein the flanges of the partition member are sandwiched by the flanges of the first outer frame member and the second outer frame member, thus integrating the first outer frame member, the second outer frame member, and the partition member and forming the first mixing passage and the second mixing passage.

7. (Withdrawn) A method of manufacturing the mixing tube of claim 5, the method comprising the steps of:

molding the first frame member and the second frame member from a thermoplastic resin;

forming holes in a partition member that is made out of a thermoplastic resin;

welding ends of flanges of the partition member, the first frame member, and the second frame member, such that the flanges of the first outer frame member and the second outer frame member sandwich the flanges of the partition member, to thereby integrate the first outer frame member, the second outer frame member, and the partition member and form the first mixing passage and the second mixing passage.

8. (Withdrawn) The method of manufacturing a mixing tube according to claim 7, wherein the first outer frame member and the second outer frame member are molded while forming intermediate partitions that divide the first mixing passage and the second mixing passage, and wherein one of the intermediate partitions and the partition member are welded, and the intermediate partition portions are welded.

9. (Withdrawn) A method of manufacturing the mixing tube of claim 5, the method comprising the steps of:

molding the first outer frame member and the second outer frame member from a thermoplastic resin while forming intermediate partitions that divide the first mixing passage and the second mixing passage;

forming holes in the partition members that are made from a thermoplastic resin while forming joining portions that contact the intermediate partitions of the first outer frame member and the second outer frame member;

welding flanges of the first outer frame member and flanges of one of the partition members in a first welding step;

welding flanges of the second outer frame member and flanges of the other partition member in a second welding step; and

welding flanges of members manufactured during the first and second welding steps.

10. (Withdrawn) A method of manufacturing the mixing tube of claim 5, the method comprising the steps of:

molding the first outer frame member and the second outer frame member from a thermoplastic resin while forming intermediate partitions that divide the first mixing passage and the second mixing passage;

forming holes in partition members that are made from a thermoplastic resin while forming joining portions that contact the intermediate partitions of the first outer frame member and the second outer frame member;

welding flanges of the first outer frame member and flanges of one of the partition members, and welding the intermediate partitions of the first outer frame member and the joining portions of the one partition member in a first welding step;

welding flanges of the second outer frame member and flanges of the other partition member, and welding the intermediate partitions of the second outer frame member and the joining portion of the other partition member in a second welding step; and

welding flanges of members manufactured during the first and second welding steps.

11. (New) The mixing tube according to claim 1, wherein each of the plurality of holes formed in the partition member have a polygonal outer peripheral shape.